INDEX TO VOLUME XCIX.

TP700
.A5

July 1 to December 31, 1913.

An Asterisk (*) Denotes an Illustrated Article.

A

Accidents, Coal Mine 331
*Accurate Records of Street Main and Service Work, a Plea for. Their Use and Some Methods Employed in their Preparation, by Daniel L. Hill .. 181
Address of President Arthur Hewitt, Canadian Gas Association 150
Address of President C. E. White, Southern Gas Association 87
Address of President C. S. Vance, Pacific Coast Gas Association 195
Address of President I. F. Wortendyke, Wisconsin Gas Association 37
Address of President Walter R. Addicks, American Gas Institute 260
Address of President Warren S. Blauvelt, Michigan Gas Association 177
Administration of the Gas Business, How to Establish a More Intimate Relation between Departments in the, by R. C. Ware 395
Advertising and New Business Department, Efficiency in the, by H. W. Easterly 52
*Alrich, Herbert H., Water in Holder Cups and Tanks, The Behavior of 307
*Alt, Harold L., Gas Appliances in the Washington Irving High School, New York City 33
Alt, Harold L., Gas versus Fuel Oil 353
*Alt, Harold L., Piping for Domestic Use of Gas in the Bushwick High School, Brooklyn, N. Y., Description of 337
Analysis of Coals in the United States, "Bulletin 22" 215
*Appliances and Methods, New, 12, 29, 44, 61, 76, 92, 109, 125, 141, 157, 174, 188, 205, 222, 236, 252, 285, 301, 315, 332, 350, 363, 380, 398, 412
*Artificial Daylight for Color Matching, by Robert Ffrench Pierce 68
Association of Gas Managers, North British, Meeting of the, by a Special Correspondent..... 193
*Astoria-Bronx Tunnel, The New York Consolidated Gas Company 65
Automatic Gas Water Heater, by Charles A. Shannon 70

B

*Babcock, C. B., Gas Arc Lamps, Why the Gas Company Should Handle 196
*Barrett, W. E., Construction of the Midway Gas Line 129
*Bayer Process for Purifying and Enriching Gas, The 180
Beer, H. H., Gas Stove Retailing 161
*Berg, Adolph M., Photography by Artificial Light, 1
Blauvelt, Warren S., President Michigan Gas Association, Address of 177
Book Reviews.....14, 142, 158, 169, 254, 265
*Brown High Resistance Electric Pyrometer, The.... 203
Burnett, Frederick, Carbonizing Plant, What Type of, shall we Adopt? 149
*By-Products in the Modern Coke Oven Plant, Recovery of 199

C

Calcium Carbide, Manufacture of..... 90
Calorific Power of Coals 163
*Cambridge (Mass.) Gas Light Company, New Office Building of the 81
*Carbon Bisulphide, Safe Distillation of..... 141
*Carbonization Methods, Report of Committee on Progress in, American Gas Institute..... 401
*Carbonization of Coal in Vertical Retorts, Notes on the, by O. B. Evans 338
Carbonizing Plant, What Type of, shall we Adopt? by Frederick Burnett 149
*Carpenter, Charles C., Removal of Carbon Bisulphide by Hot Purification 49
Carr, H. H., Operation of a Medium Size Gas Plant from a Manager's Standpoint 116
Catalysis 75
*Chaney, W., Coke Oven Carbonization..... 17
*Coal and Coke Handling, Installation, The Dodge, Lima Station, Indiana Lighting Company..... 165
Coal Barges, Producer Gas Engines in..... 380
Coal Dust Explosion Tests in the Experimental Mine, First Series of 76
Coal Liming, by Thomas Holgate 330
Coal Mine Accidents 331
Coals, Government Classification of 379
Coals in the United States, Analysis of, "Bulletin 22" 215
*Coal Storage Plant for the Indianapolis Light and Heat Company, A Model 146
Coke Breaks Record 11
*Combination Coke and Gas Oven, The Koppers.... 385
Commercial and Engineering Departments, Closer Relationship between the, by C. N. Stannard and F. Q. Cannon 356
*Commercial Lighting, by George H. Hills..... 154
Concrete, Waterproofing 186
*Construction of the Midway Gas Line, by W. E. Barrett 129
Cook, H. R., Jr., Motor Vehicles by Gas Companies, The Use of 82

CORRESPONDENCE—

Mr. Berkley Explains the Situation 317
Mr. C. W. Hare Seems to Make a Personal Matter Out of Mr. Cohn's Objections..... 409
Mr. Mayers Declares the Blaugas Trials were Satisfactory 361
Special English Correspondence,.....59, 124, 204, 284, 349, 407
Corrosion of Iron and Steel Sheets, Influence of Copper on 246

D

Depreciation: Estimated and Actual, by Alex. C Humphreys 167
*Dodge Coal and Coke Handling Installation, The, Lima Station, Indiana Lighting Company..... 165

E

Easterly, H. W., Advertising and New Business Department, Efficiency in the 52

EDITORIALS—

Alley and Suburban Lighting, Philadelphia Specifications for 297
American Gas Institute Annual Meeting, The Last Day's Session of the..... 264
American Gas Institute, Local Committee of Arrangements, Richmond Meeting 232
American Gas Institute, Special Editorial Correspondence 248
American Gas Institute, The Annual Meeting of the 136
American Retort Materials 24
Astoria Tunnel, Consolidated Gas Company, The Meeting of the Headings 41
Belated Narrative, A 217
Boilers, Uniform Specifications for..... 233
Brady, Anthony N., Death of 56
Brorix Gas and Electric Company, Annual Outing, Employees 88
Cambridge Gas Light Company, New Office Building for the 57
Canadian Gas Association's Sixth Session, The Closing Times of the 152
Canadian Gas Association, Special Editorial Correspondence 136
Canadian Gas Association, The Annual Meeting. 120
Cathell, Captain Jonathan D., Obituary Note.... 137
Century Ago, A Reminder of a 328
"Chief" Bradley, An Appreciation of..... 56
Chollar, Byron E., Death of..... 296
Coal, Utilization of 233
Coney Island Gas Rates 264
Courtesy of the Women of Richmond, An Appreciation of the 280
Dangerous Light 297
Dessau Verticals, Recent Installations 201
Digest of Circular Number 32, Second Edition. 136
Drake, J. Armitage, Obituary Note 40
"Educating the Public in the Use of Light".... 136
Empire State Gas and Electric Association, Annual Meeting 185
Empire State Gas and Electric Association, Geneva Meeting 344
Empire State Gas and Electric Association, Mid-Year Meeting 361
Empire State Gas and Electric Association, Ninth Annual Convention 232
Employees, Education of 312
Every Part of the Business, To Know Something of 344
Gas Engineering Degree Fund, Pacific Coast Gas Association, To the Subscribers 72
"Gas Meeters" 185
"Gas Meeters," New England Section, Fall Meeting of the 329
"Gas Meeters," New York Section 264
"Gas Meeters'" Night 329
"Gas Meeters," October Session, Philadelphia Section 296
"Gas Meeters" Resuming Activity, The..... 168
General Gas Light Company's Victory in the Infringement Suit 201
German Association of Gas and Water Engineers, Annual Meeting 41
Good Publicity Work 280
Good Work Well Done, A..... 344
Government Investigation of All Public Utilities 296
Guerard, Augustus Godin, Obituary Note..... 88
Happenings in Philadelphia, An Echo of the... 376
Helping to Train Gasfitters, An English Plan for. 121
Hodgson, Joseph Ernest, Death of 296
Hornby, John, Death of 185
Humphreys, President Alex. C., A Splendid Presentation by 24
Illuminating Engineering Society, Anent the Pittsburgh Meeting 88
Illuminating Engineering Society and National Electric Light Association, Joint Meeting, New York Sections 344
Illuminating Engineering Society, December Meeting, New York Section..... 376
Illuminating Engineering Society Notes 56
Illuminating Engineering Society, November Meeting, Philadelphia Section 296
Illuminating Engineering Society, October Meeting, New York Section 264
Illuminating Engineering Society, October Meeting, Philadelphia Section 281
Illuminating Engineering Society, Pittsburgh Convention 25, 200, 216
Illuminating Engineering Society, Seventh Annual Convention, The Plan of Travel from the West to Pittsburgh, Pa..... 104
Illuminating Engineering Society, The Officers of the 25
Illuminating Engineering Society, The Preliminaries, Pittsburgh Meeting 121
Injunction Denied, Fargo, N. D..... 399
Institution of Gas Engineers, London, Jubilee Meeting 8
International Commission on Illumination 185
Key West Gas Company's Employees' Association, The 312
Light and Heating 408
Light, Educating the Public as to the Proper Use of 408
Lower Rate Agitation, Failure of..... 376
"Magnificent Stipend! A" 72
Michigan Gas Association, Special Editorial Correspondence 184
Michigan Meeting, The Close of the..... 200
Milwaukee Municipal Lighting Plant, Wisconsin Commission Advises Against 233
More Progress 408
National Advertising 56, 233
National Advertising, An Expressed Dissent Respecting 392
National Commercial Gas Association, Annual Meeting, New England Section 280
National Commercial Gas Association, Closing Times, the Philadelphia Convention 376
National Commercial Gas Association, December Meeting, New England Section 393

INDEX TO VOLUME XCIX.

TP700
.A5

July 1 to December 31, 1913.

An Asterisk (*) Denotes an Illustrated Article.

A

Accidents, Coal Mine 331
*Accurate Records of Street Main and Service Work, a Plea for. Their Use and Some Methods Employed in their Preparation, by Daniel L. Hill .. 181
Address of President Arthur Hewitt, Canadian Gas Association 150
Address of President C. E. White, Southern Gas Association 87
Address of President C. S. Vance, Pacific Coast Gas Association 195
Address of President I. F. Wortendyke, Wisconsin Gas Association 37
Address of President Walter R. Addicks, American Gas Institute 260
Address of President Warren S. Blauvelt, Michigan Gas Association 177
Administration of the Gas Business, How to Establish a More Intimate Relation between Departments in the, by R. C. Ware 395
Advertising and New Business Department, Efficiency in the, by H. W. Easterly 52
*Alrich, Herbert H., Water in Holder Cups and Tanks, The Behavior of 307
*Alt, Harold L., Gas Appliances in the Washington Irving High School, New York City 33
Alt, Harold L., Gas versus Fuel Oil 353
*Alt, Harold L., Piping for Domestic Use of Gas in the Bushwick High School, Brooklyn, N. Y., Description of 337
Analysis of Coals in the United States, "Bulletin 22" 215
*Appliances and Methods, New, 12, 29, 44, 61, 76, 92, 109, 125, 141, 157, 174, 188, 205, 222, 236, 252, 285, 301, 315, 332, 350, 363, 380, 398, 412
*Artificial Daylight for Color Matching, by Robert Ffrench Pierce 68
Association of Gas Managers, North British, Meeting of the, by a Special Correspondent..... 193
*Astoria-Bronx Tunnel, The New York Consolidated Gas Company 65
Automatic Gas Water Heater, by Charles A. Shannon 70

B

*Babcock, C. B., Gas Arc Lamps, Why the Gas Company Should Handle 196
*Barrett, W. E., Construction of the Midway Gas Line 129
*Bayer Process for Purifying and Enriching Gas, The 180
Beer, H. H., Gas Stove Retailing 161
*Berg, Adolph M., Photography by Artificial Light, 1
Blauvelt, Warren S., President Michigan Gas Association, Address of 177
Book Reviews.....14, 142, 158, 169, 254, 265
*Brown High Resistance Electric Pyrometer, The.... 203
Burnett, Frederick, Carbonizing Plant, What Type of, shall we Adopt? 149
*By-Products in the Modern Coke Oven Plant, Recovery of 199

C

Calcium Carbide, Manufacture of..... 90
Calorific Power of Coals 163
*Cambridge (Mass.) Gas Light Company, New Office Building of the 81
*Carbon Bisulphide, Safe Distillation of..... 141
*Carbonization Methods, Report of Committee on Progress in, American Gas Institute..... 401
*Carbonization of Coal in Vertical Retorts, Notes on the, by O. B. Evans 338
Carbonizing Plant, What Type of, shall we Adopt? by Frederick Burnett 149
*Carpenter, Charles C., Removal of Carbon Bisulphide by Hot Purification 49
Carr, H. H., Operation of a Medium Size Gas Plant from a Manager's Standpoint 116
Catalysis 75
*Chaney, W., Coke Oven Carbonization..... 17
*Coal and Coke Handling, Installation, The Dodge, Lima Station, Indiana Lighting Company..... 165
Coal Barges, Producer Gas Engines in..... 380
Coal Dust Explosion Tests in the Experimental Mine, First Series of 76
Coal Liming, by Thomas Holgate 330
Coal Mine Accidents 331
Coals, Government Classification of 379
Coals in the United States, Analysis of, "Bulletin 22" 215
*Coal Storage Plant for the Indianapolis Light and Heat Company, A Model 146
Coke Breaks Record 11
*Combination Coke and Gas Oven, The Koppers.... 385
Commercial and Engineering Departments, Closer Relationship between the, by C. N. Stannard and F. Q. Cannon 356
*Commercial Lighting, by George H. Hills..... 154
Concrete, Waterproofing 186
*Construction of the Midway Gas Line, by W. E. Barrett 129
Cook, H. R., Jr., Motor Vehicles by Gas Companies, The Use of 82

CORRESPONDENCE—

Mr. Berkley Explains the Situation 317
Mr. C. W. Hare Seems to Make a Personal Matter Out of Mr. Cohn's Objections..... 409
Mr. Mayers Declares the Blaugas Trials were Satisfactory 361
Special English Correspondence,.....59, 124, 204, 284, 349, 407
Corrosion of Iron and Steel Sheets, Influence of Copper on 246

D

Depreciation: Estimated and Actual, by Alex. C Humphreys 167
*Dodge Coal and Coke Handling Installation, The, Lima Station, Indiana Lighting Company..... 165

E

Easterly, H. W., Advertising and New Business Department, Efficiency in the 52

EDITORIALS—

Alley and Suburban Lighting, Philadelphia Specifications for 297
American Gas Institute Annual Meeting, The Last Day's Session of the..... 264
American Gas Institute, Local Committee of Arrangements, Richmond Meeting 232
American Gas Institute, Special Editorial Correspondence 248
American Gas Institute, The Annual Meeting of the 136
American Retort Materials 24
Astoria Tunnel, Consolidated Gas Company, The Meeting of the Headings 41
Belated Narrative, A 217
Boilers, Uniform Specifications for..... 233
Brady, Anthony N., Death of 56
Brorix Gas and Electric Company, Annual Outing, Employees 88
Cambridge Gas Light Company, New Office Building for the 57
Canadian Gas Association's Sixth Session, The Closing Times of the 152
Canadian Gas Association, Special Editorial Correspondence 136
Canadian Gas Association, The Annual Meeting. 120
Cathell, Captain Jonathan D., Obituary Note.... 137
Century Ago, A Reminder of a 328
"Chief" Bradley, An Appreciation of..... 56
Chollar, Byron E., Death of..... 296
Coal, Utilization of 233
Coney Island Gas Rates 264
Courtesy of the Women of Richmond, An Appreciation of the 280
Dangerous Light 297
Dessau Verticals, Recent Installations 201
Digest of Circular Number 32, Second Edition. 136
Drake, J. Armitage, Obituary Note 40
"Educating the Public in the Use of Light".... 136
Empire State Gas and Electric Association, Annual Meeting 185
Empire State Gas and Electric Association, Geneva Meeting 344
Empire State Gas and Electric Association, Mid-Year Meeting 361
Empire State Gas and Electric Association, Ninth Annual Convention 232
Employees, Education of 312
Every Part of the Business, To Know Something of 344
Gas Engineering Degree Fund, Pacific Coast Gas Association, To the Subscribers 72
"Gas Meeters" 185
"Gas Meeters," New England Section, Fall Meeting of the 329
"Gas Meeters," New York Section 264
"Gas Meeters'" Night 329
"Gas Meeters," October Session, Philadelphia Section 296
"Gas Meeters" Resuming Activity, The..... 168
General Gas Light Company's Victory in the Infringement Suit 201
German Association of Gas and Water Engineers, Annual Meeting 41
Good Publicity Work 280
Good Work Well Done, A..... 344
Government Investigation of All Public Utilities 296
Guerard, Augustus Godin, Obituary Note..... 88
Happenings in Philadelphia, An Echo of the... 376
Helping to Train Gasfitters, An English Plan for. 121
Hodgson, Joseph Ernest, Death of 296
Hornby, John, Death of 185
Humphreys, President Alex. C., A Splendid Presentation by 24
Illuminating Engineering Society, Anent the Pittsburgh Meeting 88
Illuminating Engineering Society and National Electric Light Association, Joint Meeting, New York Sections 344
Illuminating Engineering Society, December Meeting, New York Section..... 376
Illuminating Engineering Society Notes 56
Illuminating Engineering Society, November Meeting, Philadelphia Section 296
Illuminating Engineering Society, October Meeting, New York Section 264
Illuminating Engineering Society, October Meeting, Philadelphia Section 281
Illuminating Engineering Society, Pittsburgh Convention 25, 200, 216
Illuminating Engineering Society, Seventh Annual Convention, The Plan of Travel from the West to Pittsburgh, Pa..... 104
Illuminating Engineering Society, The Officers of the 25
Illuminating Engineering Society, The Preliminaries, Pittsburgh Meeting 121
Injunction Denied, Fargo, N. D..... 399
Institution of Gas Engineers, London, Jubilee Meeting 8
International Commission on Illumination 185
Key West Gas Company's Employees' Association, The 312
Light and Heating 408
Light, Educating the Public as to the Proper Use of 408
Lower Rate Agitation, Failure of..... 376
"Magnificent Stipend! A" 72
Michigan Gas Association, Special Editorial Correspondence 184
Michigan Meeting, The Close of the..... 200
Milwaukee Municipal Lighting Plant, Wisconsin Commission Advises Against 233
More Progress 408
National Advertising 56, 233
National Advertising, An Expressed Dissent Respecting 392
National Commercial Gas Association, Annual Meeting, New England Section 280
National Commercial Gas Association, Closing Times, the Philadelphia Convention 376
National Commercial Gas Association, December Meeting, New England Section 393

INDEX TO VOL. XCIX.

National Commercial Gas Association, Educational Course, 1913-14 Plan 296
National Commercial Gas Association, June Meeting, Philadelphia Section 9
National Commercial Gas Association, Philadelphia Gas Works' Section..... 217
National Commercial Gas Association, Philadelphia Gas Works' Section, November Meeting 361
National Commercial Gas Association, July Meeting, Philadelphia Section 41
National Commercial Gas Association, Special Editorial Correspondence 360
National Commercial Gas Association, The Philadelphia Convention 312
National Commercial Gas Association, Transportation Arrangements, December Meeting, Philadelphia 232
New Jersey State Gas Association..... 312
New Jersey State Gas Association, Autumn Meeting 280, 296
New Jersey State Gas Association, Midsummer Meeting 25, 56
Ohio Commission Overrules a City Council, The. 120
Oil, War for 328
"On to Richmond" 168
Pacific Coast Gas Association, The Final Session. 216
Pacific Coast Gas Association, Special Editorial Correspondence 184
Panama-Pacific International Exposition, Gas Service 264
Power and Authority of Commission, No Limit to 344
Practical Gas Salesmanship, Special Course in... 105
President Hewitt's Address 152
Prosser, Robert W., Obituary Note 104
Publicity Defeats Municipal Ownership Proposition 312
Public Service Commissions, Summary of the Existing 169
Safety Rally, A Concise Account of a..... 25
San Jose Meeting, Special Correspondence..... 200
Secretary Clark Insists 344
Sir Corbet Woodall's Address 9
Smith, Floyd G., Obituary Note..... 40
Society of Gas Engineering, New York City, Fifth Annual Meeting of the 168
Society of Gas Lighting, November Meeting... 328
Standard Regulations for Manufactured Gas and Gas Service 264
Terhune, Charles F., Death of 104
Educating the Public, by Ernest F. Lloyd..... 218
*Egner, Frederic, An Old-New Method 100
Electric and Gas and By-Products Recovery Plant at Accrington, England, An 147
Electroscope and How to Construct One, The, by Dr. Leonard Keene Hirschberg..... 101
Elliott, E., Leavenworth, Industrial Lighting, Notes on 21
English Gas Fittings and Appliances on the Continent 119
English National Gas Congress and Exhibition..... 165
Engineering and Commercial Departments, Closer Relationship between the, by C. N. Stannard and F. Q. Cannon 356
Enormous Junk Heap, Our 91
*Equipment for Lighting the Laclede Gas Light Company's Building, St. Louis 362
Erickson, Halford, Uniform Accounts and Statistics, Importance of 54
*Evans, O. B., Carbonization of Coal in Vertical Retorts, Notes on the 338
Exhausters, The Operation of, by "A Manchester Man" 241
Exhibitors, Gas Show, Philadelphia, Pa., December 2-6, 1913 348
*Experience Department, Pacific Coast Gas Association 250
Experimental Mine, First Series of Coal Dust Explosion Tests in the 76
*Extractor, Tar, a New 359

F

Faults in Incandescent Burners 379
*Ferric Oxide, Some of the Physical Characteristics of, by W. H. Fulweiler and A. F. Kunberger.... 369
Fogg, Mr. Oscar H., Talks to Londoners..... 305

G

Gas and Electric and By-Products Recovery Plant at Accrington, England, A 147
*Gas Appliances in the Washington Irving High School, New York City, by Harold L. Alt..... 33
*Gas Appliances, Report of Committee on Utilization of, American Gas Institute 325
*Gas Arc Lamps, Why the Gas Company Should Handle, by C. B. Babcock 196
Gas Associations, Meeting Times of the Various, 16, 32, 48, 64, 80, 96, 112, 128, 144, 160, 176, 192, 208, 224, 240, 256, 272, 288, 304, 320, 336, 352, 368, 384, 400, 416
Gas Coal for Use in Gas Works, The Value of a, by T. D. Miller 194
Gas Coals, South African 119
Gas Company must have Notice of Existing Leakage before it can be Held Liable for an Explosion. 132
*Gas Engines Cooled by Internal Injection of Water, by Prof. Bertram Hopkinson 132
Gas Exhibition, London's National, by a "Special Correspondent" 259
*Gasholders: Their Construction and Use, by Ernst Körting 97
*Gasifying Gas Coke, A Producer for..... 242
Gas Making Materials, Increasing Cost of, by B. O. Tippy 179
Gas Production, London Progress in, by an "Occasional Correspondent" 34
Gas Rates, by Alten S. Miller 405
Gas Securities, The Market for.....16, 32, 48, 64, 80, 96, 112, 128, 144, 160, 176, 192, 208, 224, 240, 256, 272, 288, 304, 320, 336, 352, 368, 384, 400, 416
Gas Show Exhibitors, Philadelphia, Pa., December 2-6, 1913 348
Gas Stove Retailing, by H. H. Beer..... 161
Gas Used in Mantles and Heating Appliances, The Percentage of, by C. H. Stone..... 407
Gas versus Fuel Oil, by Harold L. Alt 353
Gerry, N. E., House Maintenance System, The..... 151
Gould, J. A., Street Mains, Protection of, by the Intelligent Use of Underground Space 406
Government Classification of Coals..... 379
Gregg, Guy F., Selling Methods 38

H

Hanlon, J. P., New Business..... 321
Hewitt, Arthur, President Canadian Gas Association, Address of 150
*High Pressure Steel Pipe, by James B. Scott..... 75
*High-Resistance Electric Pyrometer, The Brown... 203
*Hill, Daniel L., Accurate Records of Street Main and Service Work, a Plea for. Their Use and Some Methods Employed in their Preparation.... 181
*Hills, George H., Commercial Lighting..... 154
Hirshberg, Dr. Leonard Keene, Electroscope and How to Construct One, The 101
Holgate, Thomas, Coal Liming..... 330
*Honoring President Frampton 188
*Hopkinson, Prof. Bertram; Gas Engines Cooled by Internal Injection of Water 132
*Hot Purification Removal of Carbon Bisulphide by, by Charles C. Carpenter 49
*House Maintenance System, The, by N. E. Gerry... 151
Howsmon, G. M., Selling Domestic Gas Appliances... 10
Humphreys, Alex. C., Depreciation; Estimated and Actual 167
Humphreys, Alex. C., Public Service Rate Making.. 209
*Humphreys, Norton H., National Gas Exhibition, London, England, The 257
Humphreys, Norton H., Special English Correspondence 59, 124, 204, 284, 349, 407
Hydrocarbon Motor Fuels 109

I

Illinois Public Utilities Commission 7
*Illumination and Education: Notes on a Discussion, Conference of Educationalists, National Gas Exhibition, London, England, by a "Special Correspondent" 322
*Illumination of a Sunday-school Room with Gas, Experiments in the, by Edwin F. Kingsbury..... 282
Improving Operating Conditions in the Small Gas Works, by H. G. Stillson 3
Incandescent Burners, Faults in 379
*Indianapolis Light and Heat Company, A Model Coal Storage Plant for the 146
Industrial Appliance Campaign, The, by B. F. Noble. 101
Industrial Fuel Appliances, Recent Developments in, by E. C. Weisgerber 23
*Industrial Fuel Situation, The, and Why Gas Companies Should Handle Industrial Appliances, by John B. Redd 211
Industrial Lighting, Notes on, by E. Leavenworth Elliott 21
Iowa District Gas Association, Ninth Annual Meeting 2, 22, 35
Iron and Steel Sheets, Influence of Copper on Corrosion of 246
Items of Interest from Various Localities.....14, 30, 46, 62, 78, 94, 110, 126, 142, 158, 174, 190, 206, 222, 238, 254, 270, 286, 302, 318, 334, 350, 366, 382, 398, 414
*Ives, Herbert E., Illumination from Large Area Light Sources, Some Home Experiments in.... 133

J

James, W. H., Operating a Storeroom..... 35
*Jones, L. B., Oil Gas 273
Junk Heap, Our Enormous 91

K

*Keppelmann, D. E., Modern Gas Distribution and the Part Played by the Automobile..... 263
*Kingsbury, Edwin F., Illumination of a Sunday-school Room with Gas, Experiments in the..... 282
*Koppers' Combination Coke and Gas Oven, The..... 385
*Koppers' Process for Sulphate of Ammonia Production, The 247
Körting, Ernst, Gasholders: Their Construction and Use 97

L

*Large Area Light Sources, Some Home Experiments in Illumination from, by Herbert E. Ives. 133
Lewis, Ernest A., Metal Failures, A New Factor in. 11
Lighting Art, The Status of the, by Preston S. Millar 226
*Lighting Equipment of the Laclede Gas Light Company's Building, St. Louis 362
Lighting, Some Studies in..... 187
Lighting Tables, Public (Advertising Section)..... 10
Light in Industrial Occupations, The Importance of, by Warfield Webb 145
*Liquid Purification of Coal Gas, by James G. O'Neill 295
Lloyd, Ernest F., Educating the Public..... 218
London's National Gas Exhibition, by a "Special Correspondent" 259
London Transportation and Lighting 140

M

Maine Public Utilities Law, New..... 122
Mains and Pipe Lines, of Steel and Wrought Iron, The Installation of, by H. L. Rice..... 388
Manufacture of Calcium Carbide 90
Meeting Times of the Various Gas Associations...16, 32, 48, 64, 80, 96, 112, 128, 144, 160, 176, 192, 208, 224, 240, 256, 272, 288, 304, 320, 336, 352, 368, 384, 400, 416
Medium Size Gas Plant, Operation of a, from a Manager's Standpoint, by H. H. Carr..... 116
Metal Failures, A New Factor in, by Ernest A. Lewis 11
Methane in Water Gas 140
*Methods and Appliances, New.....12, 29, 44, 61, 76, 92, 109, 125, 141, 157, 174, 188, 205, 222, 236, 252, 285, 301, 315, 332, 350, 363, 380, 398, 412
Michigan Workmen's Compensation Law, Especially as it Affects Gas Companies, Practical Effects of the, by A. G. Schroeder 311, 323
Millar, Preston S., Lighting Art, The Status of the. 226
Miller, Alten S., Gas Rates 405
Miller, T. D., Gas Coal for Use in Gas Works, The Value of a 194
*Modern Coke Oven Plant, Recovery of By-Products in the 199
*Modern Gas Distribution and the Part Played by the Automobile, by D. E. Keppelmann..... 263
Motor Fuels, Hydrocarbon 109
Motor Vehicles by Gas Companies, The Use of, by H. R. Cook, Jr..... 82

N

National Gas Congress and Exhibition, English..... 165
*National Gas Exhibition, London, England, Illumination and Education: Notes on a Discussion, Conference of Educationalists, by a "Special Correspondent" 322
*National Gas Exhibition, London, England, The, by Norton H. Humphreys 257
New Business, by J. P. Hanlon..... 321
New Maine Public Utilities Law 122
*New Office Building of the Cambridge (Mass.) Gas Light Company 81
Noble, B. F., Industrial Appliance Campaign, The... 101
North British Association of Gas Managers, Meeting of the, by a "Special Correspondent"..... 193
Notice of Existing Leakage, Gas Company must have before it can be Held Liable for an Explosion. 132

NOTICES, OFFICIAL—

American Gas Institute.....40, 56, 72
Illinois Gas Association 88, 168
Iowa District Gas Association.....136, 152
Michigan Gas Association 104, 120, 136, 152, 168

N.G.D. 19/x/14

INDEX TO VOL. XCIX.

Pacific Coast Gas Association..... 168
Wisconsin Gas Association 296

O

*Oil Gas, by L. B. Jones 273
Oil Gas, Notice on the Production and Application of, by a Manchester Man 294
*Oil Gas, Standards of Quality and Pressure of, by W. H. Papst 298
*Oil Situation, The, by Col. E. G. Pratt..... 27
*Old-New Method, An, by Frederic Egner 100
*O'Neill, James G., Liquid Purification of Coal Gas.. 295
Operation of Exhausters, The, by "A Manchester Man" 241
Operating a Storeroom, by W. H. James..... 35
Operating a Water Gas Machine by the Use of the Pyrometer, The Advantage Gained in, by F. L. Weissner 5
Oven Carbonization, Coke, by W. Chaney..... 17

P

*Pacific Coast Gas Association, Experience Department 250
*Pacific Coast Gas Association, Wrinkle Department.. 230
*Papst, W. H., Oil Gas, Standards of Quality and Pressure of 298
Patent Issues, Recent 14, 30, 63, 77, 110, 143, 158, 175, 191, 238, 286, 318, 365, 382
Pennsylvania Public Service Company Law, The..... 166
Petroleum Production 59
*Philbrick, J. E., Store Lighting..... 244
*Photography by Artificial Light, by Adolph M. Berg. 1
*Physical Characteristics of Ferric Oxide, Some of the, by W. H. Fulweiler and A. F. Kunberger.. 369
*Pierce, Robert Ffrench, Artificial Daylight for Color Matching 68
*Piping for Domestic Use of Gas in the Bushwick High School, Brooklyn, N. Y., Description of, by Harold L. Alt..... 337
Power of Coals, Calorific 163
*Pratt, Col. E. G., Oil Situation, The..... 27
*President Frampton, Honoring 188
*Producer for Gasifying Gas Coke..... 242
Producer Gas Engines in Coal Barges..... 380
Production and Application of Oil Gas, Notice on the, by a Manchester Man..... 294
*Progress in Carbonization Methods Report of Committee on, American Gas Institute 401
Progress in Gas Production, London, by an "Occasional Correspondent" 34
Publications 285
Public Lighting Tables (Advertising Section)..... 10
Public Policy, A Gas Company's, by Lester A. Wright 214
Public Service Rate Making, by Alex. C Humphreys. 209
Public Utilities Commission, Illinois 7
Public Utility Commission, West Virginia 43
*Punched Holes in Structural Steel 395
*Purifying and Enriching Gas, The Bayer Process for 180

R

*Redd, John B., Industrial Fuel Situation, The, and Why Gas Companies Should Handle Industrial Appliances 211
*Retorts, Plea for Standardizing 147
Rice, H. L., Mains and Pipe Lines of Steel and Wrought Iron, The Installation of..... 388
Retorts, Saline Corrosion of 247

S

*Safe Distillation of Carbon Bisulphide 141
Saline Corrosion of Retorts 247
Schroeder, A. G., Michigan Workmen's Compensation Law, Especially as it Affects Gas Companies, Practical Effects of the 311, 323
*Scott, James B., High Pressure Steel Pipe..... 75
Selling Domestic Gas Appliances, by G. M. Howsmon 10
Securities, Gas, The Market for.....16, 32, 48, 64, 80, 96, 112, 128, 144, 160, 176, 192, 208, 224, 240, 256, 272, 288, 304, 320 336, 352, 368, 384, 400, 416
Selling Methods, by Guy F. Gregg..... 38
Shannon, Charles A., Automatic Gas Water Heaters.. 70
South African Gas Coals 119
Southern Gas Association, Fifth Annual Meeting..86, 101, 115
*Standardizing Retorts, A Plea for..... 147
Stillson, H. G., Improving Operating Conditions in the Small Gas Works 3
Stone, C. H., Gas Used in Mantles and Heating Appliances, The Percentage of..... 407
*Street Leaks, Organization and Equipment for, and Method of Handling, by Alan D. Whittaker.... 289
Street Mains, Protection of, by the Intelligent Use of Underground Space, by J. A. Gould..... 406
Street Main Standards, by G. I. Vincent..... 373
*Store Lighting, by J. E. Philbrick..... 244
*Structural Steel, Punched Holes in..... 395
Studies in Lighting, Some..... 187
*Sulphate of Ammonia Production, The Koppers' Process for 247

T

Talks to Londoners, by Oscar H. Fogg..... 305
*Tar Extractor, A New 359
Tar, Water Gas 225
*Textile Mills, Driving by Gas, by S. F. Walker..... 113
Tippy, B. O., Gas Making Materials, Increasing Cost of 179
Transportation and Lighting, London..... 140
*Tunnel, The Astoria-Bronx, New York Consolidated Gas Company 65

U

Uniform Accounts and Statistics, Importance of, by Halford Erickson 54
*Utilization of Gas Appliances, Report of Committee on, American Gas Institute 325

V

Vance, C. S., President Pacific Coast Gas Association, Address of 195
Vincent, G. I., Street Main Standards 373

W

*Walker, S. F., Driving Textile Mills by Gas..... 113
Ware, R. C., Administration of the Gas Business, How to Establish a More Intimate Relation between Departments in the 395
Water Gas, Methane in 140
Water Gas Tar 225
*Water in Holder Cups and Tanks, The Behavior of, by Herbert H. Alrich 307
Waterproofing Concrete 186
Webb, Warfield, Light in Industrial Occupations, The Importance of 145
Weisgerber, E. C., Industrial Fuel Appliances, Recent Developments in 23
Weissner, F. L., Operating a Water Gas Machine by the Use of the Pyrometer, The Advantage Gained in 5
West Virginia Public Utility Commission..... 43
White, C. E., President Southern Gas Association, Address of 87
*Whittaker, Alan D., Street Leaks, Organization and Equipment for, and Method of Handling..... 289
Wisconsin Gas Association, Twelfth Annual Meeting 37, 69, 82
Wortendyke, I. F., President Wisconsin Gas Association, Address of 37
Wright, Lester A., Public Policy, A Gas Company's. 214
*Wrinkle Department, Pacific Coast Gas Association. 230

SPECIAL INDEX OF REPORTS OF PROCEEDINGS OF ASSOCIATIONS.

Iowa District Gas Association—Ninth Annual Meeting

(Continued from Vol. XCVIII.)

Construction, Report from Standing Committee on... 5
Distribution, Report of Standing Committee on..... 28
Gas Congress, As to Representation at the Proposed. 26
Gas Congress, Mr. Clabaugh's Response to his Appointment as Delegate to 26
Manufacturing, Report of Standing Committee on 22
National Advertising, In Respect of..... 36
New Business, Report of Standing Committee on..... 35
Regret, Telegrams of 26
Thanks, Vote of 36
Wrinkles 5

PAPERS READ—

Employee, The Welfare of the, by G. W. Clabaugh 26
Improving Operating Conditions in the Small Gas Works, by H. G. Stillson..... 3
Industrial Fuel Appliances, Recent Developments in, by E. C. Weisgerber..... 23
*Oil Situation, The, by Col. E. G. Pratt..... 27
Storeroom Operating a, by W. H. James..... 35

Southern Gas Association—Fifth Annual Meeting.

Acknowledgment by Mr. Dexter 118
Address of the President 87
Address of the President, Appointment of Committee on 90
Address of the President, Report of Committee on.. 118
Auditing Committee Report of the..... 118
Executive Committee, Report of the 87
Last Chance, The 118
Mayor Bland Welcomes the Association..... 86
Membership, Additional Applicants for..... 115
Nominating Committee, Report of the..... 118
Obituaries, Appointment of Committees on 90
Officers, Election of 118
Pan-Pacific Exposition, Appointment of Representative to 90
Question Box, The 107
Regret, Letters and Telegrams of..... 90
Residuals, Permanent Committee on 117
Resolutions Respecting the Late Mr. D. Lot Smith... 115
Response of Mr. Hoyt to Mayor Bland..... 87
Responses, Some 118
Time and Place of Next Meeting, Appointment of Committee on 90
Time and Place of Next Meeting, Report of Committe on 118
Treasurer, Report of the 115
Sad Happening, A 118
Ways and Means of Giving Architects and Builders Information as to the Use of Gas, Report of Committee to Consider 118

PAPERS READ—

Industrial Appliance Campaign, The, by B. F. Noble 101
Medium Size Gas Plant, Operation of a, from a Manager's Standpoint, by H. H. Carr.... 116
Selling Domestic Gas Appliances, by G. M. Howsmon 10

Wisconsin Gas Association—Twelfth Annual Meeting

Address of President 37
Address of President, Appointment of Committee on. 52
Address of President, Report of Committee on..... 86
Douglas Memorial, The 86
Executive Committee, Report from the 37
Gas Congress, Delegate to the Proposed..... 74
Gas Congress, In Respect of the Proposed..... 71
Legislation, In the Matter of a Committee on..... 86
Membership, Applications for 37
Memorial, Appointment of Committees on..... 71
National Advertising 74
Next Meeting, Time and Place of..... 71
Nominations, Appointment of Committee on 54
Nominations, Report of Committee on..... 71
Officers, Election of 71
President-Elect, Response of the 74
Roll Call 71
Salary of Secretary, Increase in the..... 71
Secretary & Treasurer, Report of 37

PAPERS READ—

Advertising and New Business Department, Efficiency in the, by H. W. Easterly..... 52
Automatic Gas Water Heaters, by Charles A. Shannon 70
Motor Vehicles by Gas Companies, The Use of, by H. R. Cook, Jr..... 82
Selling Methods, by Guy F. Gregg..... 38
Uniform Accounts and Statistics, Importance of, by Halford Erickson..... 54